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**FY 2019**  
**SMALL NEPA PROJECT DESCRIPTION**  
**Nez Perce-Clearwater National Forests**

Please **do not leave any field BLANK**, unless it does not apply.  
Submit form (Word doc) electronically to [jjchynoweth@fs.fed.us](mailto:jjchynoweth@fs.fed.us) by **May 9, 2019**.

*(NOTE: Italicized / red comments are for reference only. You may delete them when completing form.)*

<b>Project Name</b>	Musselshell Creek Restoration: Beaver Dam Analogs
<b>District Name (or "Forestwide")</b>	Lochsa
<b>County where project located?</b>	Clearwater
<b>FS Personnel Name, Phone Number and Email</b> <i>If a partnership, please add name, phone and email; however, an FS employee MUST BE the project proponent and point of contact.</i>	Susan Graves, 208-935-4261, <a href="mailto:sgraves@fs.fed.us">sgraves@fs.fed.us</a> Justin Peterson, Project Lead NPT Watershed 208-621-3545, <a href="mailto:justinp@nezperce.org">justinp@nezperce.org</a>
<b>Legal Location</b> <i>Township(s), Range(s), and Section(s) of project.</i>	T 35N, R 6E, Sections 19, 20, and 30
<b>District Ranger / Line Officer's Name</b> <i>Person(s) responsible for signing the decision document</i>	Brandon Knapton, Lochsa District Ranger
<b>Is the project associated with meeting a Forest target?</b>	No
<b>Which CE Category does this project fit?</b> <i>Provide citation: 36 CFR 220.6(e)(x)</i> <i>See below regarding 220.6(d)(x) projects.</i>	36 CFR 220.6(e)(18)
<b>A Project Record or written Decision are <u>not required</u> for projects for 36 CFR 220.6 (d) categories except at the Decision Maker's discretion.</b>  <i>IF being submitted under <u>36 CFR 220.6 (d)</u>, does the Decision Maker want a written Decision?</i> Yes      No  <i>If no, this form <b>does not</b> need to be filled out nor submitted to the Small NEPA planner.</i>  <i>If yes, provide the category above, complete the remainder of this form and have Decision Maker submit it to the Small NEPA planner.</i>	

**At what level does the Decision Maker want the project scoped?**

**Internal** X      External\* \_\_\_\_

*Internal scoping will be through the Small NEPA IDT, unless otherwise specified. Scoping would be documented in the Extraordinary Circumstances Checklist.*

*External scoping will be with the public via a scoping letter, a legal notice, and the scoping letter posted on the NPCWNF website. The Project will only be scoped to the Tribe(s) et al (see \* below), unless otherwise specified.*

*\*For external scoping, please to complete block below.*

**Provide a list of the individuals, groups, agencies, etc. (other than those listed below\*) with their mailing address and/or email address, of those who will be included for external Scoping.**

- DO NOT provide only a name.
- DO NOT leave this box blank: If no additional individuals et al are to be scoped please enter N/A.

**N/A**

*\* The Nez Perce and Coeur d'Alene Tribes will be scoped. The following will also be included for all SN scoping: Friends of the Clearwater, Idaho Conservation League, Thomas E. Peterson and Bill Mulligan.*

**What Level of Analysis (below) does the Decision Maker want for the Project?**

X      **Low level:** If the project's level of public scrutiny is projected to be relatively low or unknown, the line officer chooses who we would contact for scoping (limited). In this case specialists would only do the checklist for each project. Documentation for low level analysis projects would be a completed checklist filled out by the specialists, including the name of the specialist who performed the analysis, the project name, and date it was completed. No other written documentation would be generated.

\_\_\_\_\_ **Moderate level:** If the project's level of public scrutiny is projected to be relatively moderate to high, then the line officer chooses who we would contact for scoping (a little broader). In this case, specialists would complete the checklist with the only write up being for items that are present and the rationale for the effects call. No write up would be given for items in the checklist that are not present. If the determination is no effect (which generally speaking, most CE's should have zero to very little adverse effects), then document why that determination was made in one paragraph or less. If the determination is an adverse effect, then why that determination was made would be written in less three paragraphs.

**List the Management Area(s) in which your project is located.**

M2

**What are the desired conditions (*relevant to your project*) for the Management Area(s) listed above?**

**Wildlife and Fish Forest Plan Objective**

Restore selected, presently degraded fish habitat through habitat improvement projects designed to achieve stated objectives (refers back to M2, riparian areas, within timber producing grounds).

**Management Area M2**

Goal: Manage under the principles of multiple use as areas of special consideration, distinctive values, and integrated with adjacent management areas to the extent that water and other riparian dependent resources are protected.

Soil and Water goals – Conduct watershed and stream improvements that will: 1) Enhance meadow habitat and water resources. 2) Rehabilitate and/or mitigate the adverse effects of fire, flood, and other natural or management related causes.

Soil and Water standard – Meet Forest wide water quality standards

*Desired conditions are described in Chapters 2 & 3 of the Nez Perce and Clearwater Forest Plans.*

**Is the project in an Inventoried Roadless Area (IRA)?** Yes\* No x

If yes, which one?

*\* Fill in the 'Project in Roadless Area' table below, **AND** complete a Briefing Paper - note map requirements. Provide the completed Briefing Paper to the Environmental Coordinator and Brian Riggers prior to scoping.*

**Is the project in a congressionally designated area, ex. Wilderness Area, Wild & Scenic River Corridor, Research Natural Area, Historic Trail, etc.?** Yes\* No x

If yes, which one(s)?

*\* Please contact Carol Hennessey, [cahennessey@fs.fed.us](mailto:cahennessey@fs.fed.us), 935-4270, **BEFORE** submitting this proposal, to discuss how the project may affect the designated area.*

*\* For projects that occur in the **Lolo Trail National Historic Landmark**, please contact Steve Lucas, [slucas@fs.fed.us](mailto:slucas@fs.fed.us), 208-983-4040, **BEFORE** submitting this proposal, to discuss how the project may affect the designated area.*

**Are there Floodplains or Wetlands in the project area?** Yes x No

**Are there Municipal Watersheds in the project area?** Yes No x

If yes, which one?

**Is the project located in an RHCA?** Yes x No

**What is the Purpose and Need for the proposed action\*?**

To raise the water table, encourage scour, and transport of fine sediment, the NPT, in partnership with the Nez Perce –Clearwater National Forest proposes to install a series of beaver dam analogs downstream of the phase 1 project. These dam structures include small post and sapling sized material designed to function during moderate flows to impound water, scour pools, redistribute sediment, and improve channel complexity for spawning and rearing habitat along a quarter mile stretch of Musselshell Creek. The intent is to mimic the natural conditions created by beaver dam construction and their effects on stream geomorphology, and to encourage beaver occupation of the structures. There are beaver present at the lower end of Musselshell Meadows.

*\* The purpose and need describes: Why the action being proposed at this location at this time (the problem/the need for the action?). And the desired goal/outcome (the purpose) of the action.*

**Describe the Existing Condition of the project area.**

Channel incision in Musselshell Meadows may be affecting hydrology, lowering the water table. Reduction of the water table threatens culturally sensitive species and valuable wildlife habitat. Channel incision is likely a result of historic land use in the meadow ie.. grazing, upstream deforestation and associated reductions in large wood, and channelization resulting from the historic construction activity.

In the area around Musselshell Meadows, Musselshell Creek is incised and suffers from chronic, long term sediment aggradation. Long term sediment aggradation lead to diminished riffle-pool sequences; thereby deteriorating the fish habitat resources. The sediment in Musselshell Creek is the result of unique geology coupled with a long history of resource management in the drainage. Additionally, because of large scale fires in the area in the mid – 1930s, combined with legacy timber harvest, there is currently a limited amount of large wood available for natural recruitment.

In 2018, four Beaver Dam Analogs (BDAs) were constructed using hand crew from the Nez Perce Tribe, Youth Conservation Corps, and the Forest Service just upstream of this proposed project area. Initial results indicate that the BDAs are working to raise the water level in the channel and the water table in the meadow in the vicinity of the project.

**Describe the Proposed Action.**

What is provided will be used in the Scoping Letter (*external only*), by the resource specialists for their effects analyses, and in the Decision document.

Please provide detailed descriptions – in narrative paragraph form – of the following:

- who will do the work,
- where the work will take place,
- how the project area / site will be accessed,
- what specific actions / activities will be implemented,
- what equipment will be used to accomplish the above actions,
- what monitoring / additional actions will be done post-implementation,
- when the work will start, and how long it will take to complete the project.

Nez Perce Tribe personnel and other partners will install up to twelve beaver dam analogs (BDA's) along a 1.5 mile reach of Musselshell Creek in the vicinity of Musselshell meadows. This is a follow-up to a pilot project successfully implemented in 2018 to install four BDAs in a ¼ mile stretch of Musselshell Creek just upstream of the proposed project. The BDA structures, consisting of locally gathered un-treated pine or fir posts and plant materials, will span the creek channel. The posts will be installed using a hydraulic post driver. Native vegetation (willow or alder cuttings and conifer branches) will then be woven in-between the posts to create in-stream structures that will recruit additional vegetation and organic debris. The wood structures will be placed to mimic natural structures (beaver dams) already present in Musselshell Creek below the project reach. All work will be done by hand using a hydraulic post driver, chainsaw, and hand tools with access to the project sites by foot across the meadow.

The project is expected to be completed in the 2019 and 2020 field seasons during lower river flows, i.e. within the NOAA designated 'fish window' (July 15 through August 30). The project will take up to two weeks to complete.

The proposal will have minimal impacts on the local native vegetation (willow, alder and conifers). To mitigate for effects on the vegetation, a sprouting branch will be left on every harvested plant to allow for rapid re-growth. The area to be harvested for the project does not exceed 0.5 acres.

Floodplain inundation may be more frequent in the areas of the BDA installations. The structures are designed to be temporary; washing out in a high flow event. No infrastructure is present in the immediate vicinity of each structure. The bridge on FS Road 100 is within the project area but will not be affected by any local rise in water surface of water table. In addition, it should easily pass any material from the constructed dams. Beneficial effects for wetland vegetation, stream substrate sorting, and beaver habitat enhancement are expected. The Army Corps of Engineers and the Idaho Department of Water Resources Stream Alteration Permit will be informed of the project and permits obtained if required.

Nez Perce Tribe – Watershed crews will monitor the effectiveness of the structures for changes to instream conditions for two years, post-installation, and after any high flow events that may occur in subsequent years. Access restrictions will not change during the project.

**Again, please provide a narrative description of the Proposed Action.**

**List the Design Criteria / Mitigation Measures \* to be included with the Proposed Action.**

- Un-treated pine or fir posts are sourced locally.
- Saplings and branches used to weave the structures are harvested locally, and in a sustainable manner so that not all of a particular plant is cut.
- Structures are located so as to use existing in-stream features such as logs or rocks, and in areas where they are likely to produce the desired effects.
- Structures are located in a stream reach well away from forest infrastructure such as roads or trails.
- Project monitoring will include pre- and post-stream cross section and long profile surveys, photo points, and Wolman pebble counts to estimate substrate change.
- Project work will take place during the instream 'fish window' between July 15 and August 30, and will be done under the stream restoration programmatic.
- The hydraulic post driver has a gas powered power-pack which will remain on the bank.
- In the unlikely event of a broken hose only bio-based hydraulic oils will be allowed.
- There will be a spill kit with the post driver at all times.
- All equipment will be thoroughly cleaned to prevent the introduction or spread of noxious weeds.
- Waders and boots will be cleaned and dried prior to use in Musselshell Creek, and afterwards, to prevent any spread of aquatic invasive species.

*\* Additional Design Criteria/Measures can be listed under "Additional Information" on the last page of this form*

**Small NEPA IDT/resource specialists are listed below. Contact them if you have any questions regarding their resource for your project.**

Botany – Mike Hays, [mhays01@fs.fed.us](mailto:mhays01@fs.fed.us); 983-4028

Fisheries – Derrick Bawdon, [dbawdon@fs.fed.us](mailto:dbawdon@fs.fed.us); 963-4211

Heritage – Steve Lucas, [slucas@fs.fed.us](mailto:slucas@fs.fed.us); 983-4040

Hydrology – Cynthia Valle, [cvalle@fs.fed.us](mailto:cvalle@fs.fed.us); 963-4203

Minerals – Marty Jones, [martinjones@fs.fed.us](mailto:martinjones@fs.fed.us); 983-5158

Recreation – Carol Hennessey, [cahennessey@fs.fed.us](mailto:cahennessey@fs.fed.us); 935-4270

Soils – Alex Rozin, [alexandraroizin@fs.fed.us](mailto:alexandraroizin@fs.fed.us); 842-2100

Wild and Scenic River – Chris Noyes, [chnoyes@fs.fed.us](mailto:chnoyes@fs.fed.us); 935-4251

Wildlife – Jim Lutes, [jamesrlutes@fs.fed.us](mailto:jamesrlutes@fs.fed.us); 963-4202

## PROJECT MAPS

Please send – separate from this form and per the instructions outlined below – a GIS-generated map or maps of the project area (pdf format only) with the project submission email.

- Make sure that the map layers can be turned on / off / are editable.
- Make sure the map(s) fits on an 8.5 x 11 sheet of paper.

Provide at least one map, preferably “portrait” orientation, with the project area / features as:

- a Point, e.g. culvert, bridge, etc.,
- a Line, e.g. fence, road, creek, etc., and/or
- a Polygon, e.g. stand boundaries, treatment areas, etc.
  - Do not use a point if treating an area, use a polygon.
  - Points/lines/polygons need to be distinct and easily found on the map.
  - The project area / site needs to be centered on the map, especially if only one area/feature.

Please use the Forest Visitor Map as your map’s base layer.

- Do not add contour lines to the FV map unless needed for clarifying the proposed action. Contour lines can make the map difficult to read.
  - If contour lines are needed, make sure they are distinguishable from other linear features such as roads, trails, streams, etc.
- A topo map can be substituted for the FV map. If using a topo map but the contour lines are not important the topo lines should be light gray or opaque.
- Regardless of base map, make sure there are identifiable elements, e.g. towns, roads, streams, etc. on the map to help locate the project area on the landscape and that the elements are clearly labeled.

The preferred map scale (typically 1:24K) is whatever scale best presents the project area’s location and proposed activities:

- If the 1:24K scale is too small (i.e. the project feature(s) – point/line/polygon – would be hard to find or would be indistinguishable on just one map), use a larger scale to show the overall project area (coarse scale map) and smaller scaled maps to show the project features (fine scale map).
- If the 1:24K scale is too big (i.e. the project feature is a tiny point or thin line lost/hard to find on the larger landscape), use a smaller scale to highlight the feature while ensuring there are elements on the map to identify the project’s location.
- If you need to make additional maps, please make as few as possible.

At a minimum, all maps should include (with the preferred but not set in stone location on the map):

- a Title (project name and district name only (please); centered at top)
- a Legend (features clearly labeled; lower right corner)
- a Scale (in half mile, e.g. 0\_\_0.25\_\_0.5 miles, or full miles, e.g. 0\_\_0.25\_\_0.5\_\_1.0 miles; lower left corner)
- a North Arrow (upper right corner)
  - Display all of the above in boxes with black outlines and a white backgrounds (not gray or yellow)
  - Do not ‘Halo’ the text or numbers or anything else on the map. Please.
  - The Scale needs to be large enough to read the numbers.

Finally, please include the mapmakers name and the date it was created on the map.

**The Map(s) you provide will be used for Scoping the Public and the Tribes and in the Decision document. Please make sure they show – clearly, effectively, and professionally – what activity or activities are being proposed and where they are located on the Nez Perce - Clearwater National Forests.**

### SHAPEFILES

The resource specialists require the shapefile(s) of the project's proposed activities before they will conduct their analyses. Providing the shapefile does not substitute for providing a pdf map.

The Project Proponent needs to send the shapefile, or a location where the shapefile can be found, to the Small NEPA Planner (currently: jjchynoweth@fs.fed.us) by the time or shortly after the District Ranger submits this form.

- Shapefiles need to include the Project Name and have the Feature (culvert, bridge, etc.) labeled.
- Shapefiles need to include the following extensions – .dbf, .prj, .sbn, .shp, .shx, and .xml.

**PROPONENT:** When submitting the shapefile(s) you must include in the email how the location(s) of the project feature(s), i.e. line, point, and/or polygon, were determined (see below):

- Field-collected GPS data;
- From existing corporate GIS data (provide name of GIS layer);
- Created (digitized) from an aerial photo;
- Created (digitized) from the existing corporate GIS data;
- Created (digitized) from the NPCLW Visitor Map;
- Other (describe).

## Projects in Roadless Area

<p><b>What is the Inventoried Roadless Area name?</b></p> <p><i>O:\NFS\NezPerceClearwater\Project\MultiBasin\Planning\Small_NEPA_Cat_Ex\Reference Material\Roadless Rule Info</i></p>	<p><b><u>Forest Plan IRA Name (if different):</u></b></p>
<p><b>Identify the Idaho Roadless Management Classification:</b></p> <ul style="list-style-type: none"> <li>• <i>Wild Land Recreation</i></li> <li>• <i>Special Areas of Historic or Tribal Significance</i></li> <li>• <i>Primitive</i></li> <li>• <i>Backcountry Restoration</i></li> <li>• <i>General Forest, Rangeland and Grassland</i></li> </ul>	<p><b>Classification(s):</b></p>
<p><b>Does the project involve constructing or reconstructing roads?</b> Yes* No</p> <p>* If yes, see <a href="http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol2">http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol2</a> then navigate to Subpart C 294.23</p>	
<p><b>Does the project involve cutting trees?</b> Yes* No</p> <p>* If yes, see <a href="http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol2">http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol2</a> then navigate to Subpart C 294.24</p>	
<p><b>Does the project involve removing minerals, including common variety minerals?</b> Yes* No</p> <p>* If yes, see <a href="http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol2">http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol2</a> then navigate to Subpart C 294.25</p>	



Additional Information: